

EXHIBIT 11

UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF MICHIGAN
SOUTHERN DIVISION

IN RE: |
FLINT WATER CASES | No: 5:16-cv-10444-JEL-EAS
| (consolidated)
| No: 17-10164
| HON. JUDITH E. LEVY
BELLWETHER III |

Pages 1 - 103.

The videotaped deposition of
MICHAEL GREENBERG, M.D.
taken via Golkow Virtual Remote,
commencing at 10:04 a.m.
Monday, April 8, 2024
before Ann L. Bacon CSR-1297.

VIDEOGRAPHER: MR. BILL GEIGERT

HIGHLY CONFIDENTIAL

1 A. That is correct.

2 Q. Okay. You're not testifying about the differences
3 between industrial waste and human waste and how
4 any studies related to one or either may have
5 been skewed by both, correct?

6 MR. WOODS: Objection to form.

7 A. I apologize. I didn't really understand the
8 question.

9 Q. (Continuing, by Mr. Stern) One of the things
10 that we're going to talk about in a little while
11 was last evening I was provided with a number of
12 documents for the first time that indicate you
13 relied on them, and one of them is a 2019
14 article regarding biosolids in water and you
15 just told me that you are not going to be
16 testifying about how the water chemistry in
17 Flint may have changed. I'm curious what you're
18 relying on that biosolid study for?

19 MR. WOODS: Objection to form.

20 A. I don't think I relied on it for my opinions.
21 It's just something else that I read that I
22 thought we needed to provide you with a list of
23 things that I read.

24 MR. STERN: Okay. I'm going to take
25 this down off my screen, but I'm going to come

1 specific other than Dr. Roy has published a lot
2 in this area and I wanted to see what he had
3 written. Other than that, I can't think of any
4 specific impetus.

5 Q. When you read this article, did you first watch
6 Dr. Roy's Ted talk?

7 A. I didn't know he had one.

8 Q. Oh, okay. You should check it out.

9 A. I will.

10 Q. Item four is -- well, let's skip to item five.
11 It's the Roy, Edwards, Lead Release to Potable
12 Water During the Flint, Michigan Water Crisis as
13 Revealed by Routine Biosolids Monitoring. Do
14 you see that?

15 A. Yes.

16 Q. When did you read that?

17 A. I couldn't tell you. I don't remember.

18 Q. Did you rely on that to come to any of the
19 conclusions that you have as an expert in this
20 case?

21 A. I don't think I did, no.

22 Q. All right. Item four is another Edwards
23 article, the Efficacy of Corrosion Control and
24 Pipe Replacement in Reducing City-Wide Lead
25 Exposure During the Flint, Michigan Water System

1 Recovery from 2020. Do you see that?

2 A. Yes, I do.

3 Q. What was the impetus for you reading that and
4 when did you read it?

5 A. I'm not quite sure when I first read it, and the
6 impetus again was I was interested in the work
7 that Dr. Roy has done and other than that, I
8 don't think there was a specific impetus.

9 Q. Okay. And did you rely on that article in
10 coming to the opinions that you hold in this
11 case as an expert for Veolia?

12 A. I don't believe I did.

13 (Marked Exhibit No. 17.)

14 Q. (Continuing, by Mr. Stern) Okay. One second.
15 I'm going to put this in the chat. All right.
16 I'm going to mark as Exhibit 17, this is that
17 article that we just talked about, the Lead
18 Release to Potable Water During the Flint,
19 Michigan Water Crisis as Revealed by Routine
20 Biosolids Monitoring Data, right?

21 A. Yes.

22 Q. That's the article that was referenced I think
23 in number five in the letter that we just looked
24 at as Exhibit 16, right?

25 A. I don't remember the number, but, yes, we just

1 to review this article as part of your work?

2 A. I don't remember that I was asked per se to
3 review this article. There were many
4 conversations about the work of Dr. Roy. I
5 don't remember if someone did or didn't
6 specifically ask me to review this article.

7 Q. Do you feel that that article in some ways
8 supported or supports the opinions that you're
9 providing in this case?

10 A. Not necessarily, no.

11 Q. Do you plan on testifying about that article
12 when you come to trial in October or November or
13 December of 2024?

14 A. You know, it would depend on the questions that
15 I'm asked. I don't know what to anticipate at
16 that trial.

17 Q. Okay. So sitting here today, what could you
18 tell me about that article so that I'm more
19 prepared for trial in the event that you're
20 asked questions about it?

21 A. I'm not sure what your question is. I can't
22 tell you details about the article without
23 referring to the article and I mean I could go
24 through it page by page, but this went somewhat
25 beyond medical toxicology into water chemistry

1 and I can't give you the details of it right now.

2 MR. STERN: Okay. So Craig I mean I'm
3 happy to go through the entire article with him,
4 but this is a big part of the case and so if
5 he's going to testify about this article because
6 it was included in the documents produced, then
7 I am going to go through the article page by
8 page with him.

9 MR. WOODS: Okay. I mean his opinions
10 are those that are disclosed in his expert
11 report. If you want to go through the article,
12 you can do that if you want.

13 Q. (Continuing, by Mr. Stern) Okay. I'm going to
14 put it in the, I'll put it in the chat for you
15 and I'll give you a couple minutes to look at it
16 and then you can tell me where in this article
17 your opinions are either confirmed, rooted or
18 what you're relying on in this article. Hold on
19 one second.

20 A. I mean I'm going through the abstract right now
21 and I don't believe I relied on the information
22 in this. I didn't need to for my opinions. I
23 don't know that there's anything specific here
24 that would change my opinions.

25 Q. I just put the article in the chat. You

1 mentioned that if asked about it at trial, you
2 would answer, so we'll go through it a bit, and
3 we can just start by looking at the abstract if
4 you want. That might help us get to a place
5 where we're good, okay?

6 A. That's fine.

7 Q. It starts out by saying, "Routine biosolids
8 monitoring data provides an independent and
9 comprehensive means to estimate water lead
10 release pre-, during and post-Flint Water
11 Crisis." Do you see that?

12 A. I do.

13 Q. Do you have an expertise in biosolids?

14 A. I do not.

15 Q. Do you have an expertise in biosolids monitoring?

16 A. I do not.

17 Q. Okay. Do you have any specific information
18 beyond what's contained in this article how
19 these authors came up with the data that they
20 reference here on the first line of the abstract?

21 A. Beyond their description of their experimental
22 methods on the second and third page of the
23 article, no.

24 Q. Okay. I guess what I'm asking you is you're
25 relying on the veracity of everything contained

1 in this article to the extent that you believe
2 what's in this article, correct?

3 MR. WOODS: Objection to form,
4 mischaracterizes.

5 A. I did not understand your question.

6 Q. (Continuing, by Mr. Stern) You haven't tested
7 the underlying data that forms the basis of the
8 opinions in this article, right?

9 A. That's correct.

10 Q. You haven't undertaken a review of the techniques
11 used by these scientists in coming to their
12 conclusions in this article, correct?

13 A. That is correct.

14 Q. You have never once in your own career performed
15 any biosolids monitoring, right?

16 A. Correct.

17 Q. You have never compared biosolids with -- lead
18 and biosolids with water lead levels as part of
19 your work in this case or any case, correct?

20 A. Correct.

21 Q. You're not an expert in potable plumbing, correct?

22 MR. WOODS: Objection to form.

23 A. What do you mean by potable plumbing?

24 Q. (Continuing, by Mr. Stern) Do you know what
25 potable plumbing is?

1 2014, and the corresponding percentage of Flint
2 children under 6 years with elevated blood lead
3 doubling from 3.45 to 6.61 in those same three
4 months versus 2013 was not statistically higher
5 during the remaining months of the Flint Water
6 Crisis compared to pre-Flint Water Crisis or
7 post-Flint Water Crisis." Do you see that
8 sentence in the abstract?

9 A. I do, yes.

10 Q. To the extent that that statement is accurate or
11 inaccurate, you have no basis to know one way or
12 the other, correct?

13 A. Not having reviewed any of the baseline data,
14 no, that is correct.

15 Q. And then the next sentence says, "As expected,
16 lead in biosolids during the Flint Water Crisis,
17 when orthophosphate was not added, was moderately
18 correlated with water temperature, but not at
19 other times pre- and post-Flint Water Crisis when
20 orthophosphate was present." Do you see that?

21 A. Yes.

22 Q. Again, the validity of this statement is beyond
23 your knowledge other than what it says, right?

24 A. That's correct.

25 Q. Okay. "Tripling the orthophosphate dose

1 post-Flint Water Crisis versus pre-Flint Water
2 Crisis and some lead pipe removal, decreased
3 lead in biosolids and elevated blood lead levels
4 to historic lows, supporting the effectiveness
5 of these public health interventions in reducing
6 childhood water lead exposure." Do you see that?

7 A. I do.

8 Q. And your only knowledge about whether this
9 statement is accurate or not is what's contained
10 in this article, right?

11 A. There is correct.

12 Q. You didn't do any independent research to test
13 the validity of this statement, right?

14 A. No.

15 Q. And as far as you know, whether lead in biosolids
16 is a good surrogate for lead in water during,
17 prior to or subsequent to the Flint Water Crisis
18 is contained in this article, but you've done
19 nothing independent to determine the veracity of
20 the statements related to those concepts other
21 than what's in this article, correct?

22 MR. WOODS: Objection to form.

23 A. That's correct.

24 Q. (Continuing, by Mr. Stern) Sorry. There was an
25 objection to form and then you said that's